

# Jefferson Lab Alignment Group

## DATA TRANSMITTAL

**TO:** Tim Whitlatch, Ed Daly

**DATE:** Feb 22, 2002

**FROM:** Chris Gould

**Checked:**

**# :** Z741

**DETAILS:**

Below are the results of the SNS vacuum vessel 01 rail and concentricity inspection performed Feb. 20, 2002. The coordinate system for each set of measurements (located at the upstream and downstream wheel positions) was centered on the corresponding reinforcing ring at the end of the vessel. The X-axis (roll) was set parallel to the nearest top hat flange. Positive X is to the beam left. Positive Y is up. The approximate angle locations for the inside points along the vessel wall are labeled counterclockwise looking downstream with 0 degrees being parallel to the +Y axis. All measurements are in inches.

LOCATION	Z	X	Y	ID
<u>UPSTREAM</u>				
Vessel wall at 0°	29.5	-0.22	19.08	
45°	"	14.21	12.79	
90°	"	19.19	0.02	
135°	"	16.55	-9.86	
180°	"	No data-top hat flange		
225°	"	-16.22	-10.12	
270°	"	-19.02	0.00	
315°	"	-14.15	12.83	
Average vessel centerline.	"	0.07	-0.56	38.27
Vertex of rail.	"	-10.02	-15.80	
Upper edge of left wheel scuff mark.	"	12.88	-14.24	
<u>DOWNSTREAM</u>				
Vessel wall at 0°	104.2	0.25	19.24	
45°	"	15.05	11.93	
90°	"	19.17	-1.15	
135°	"	16.87	-9.17	
180°	"	0.06	-19.20	
225°	"	-16.98	- 8.85	
270°	"	-19.12	1.08	
315°	"	-13.63	13.60	
Average vessel centerline.	"	0.02	0.29	38.40
Vertex of rail.	"	-10.27	-15.70	
Upper edge of left wheel scuff mark.	"	11.00	-15.74	